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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,610	08/25/2003	Qinbai Fan	GTI-1429-CIP	2842

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MARK E. FEJER
GAS TECHNOLOGY INSTITUTE
1700 SOUTH MOUNT PROSPECT ROAD
DES PLAINES, IL 60018

EXAMINER

MERCADO, JULIAN A

ART UNIT PAPER NUMBER

1745

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Remarks

This Office action is responsive to applicant's amendment filed May 30, 2006.

Claims 1-17 are pending.

Claim Rejections - 35 USC § 102 and 103

The rejection of claims 1-8, 10 and 12-17 under 35 U.S.C. 102(e) or 35 U.S.C. 103(a) based on Hornung et al. (U.S. Pat. 6,300,001 B1) has been withdrawn.

The rejection of claims 9 and 11 under 35 U.S.C. 103(a) based on Hornung et al. and Koncar et al. (U.S. Pat. 5,942,347) has been withdrawn.

In withdrawing the ground of rejection(s) based on Hornung et al. the examiner would like to make the following remarks:

Hornung et al. is maintained to teach an austenitic alloy for the reasons already of record. The examiner acknowledges applicant's submission of the reference entitled The Making, Shaping and Treating of Steel, 10th ed. (hereinafter simply "the reference") Arguments submitted therewith have been fully considered. Applicant asserts that based on the reasoning taken in the prior Office action, the alloy disclosed by Hornung et al. can also be classified as precipitation hardenable steel. Upon close review, the examiner asserts that such classification would be incorrect. Hornung et al. disclose that the alloy contains Si in the amount of 0 to 2% by weight. It is clear from the reference that of the Types I-IV classifications of alloys, *only Type I which is Austinitic Steel has an Si content of 2.00% or greater*, while the remaining Types

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II-IV have a maximum of 1.00%. Thus, based on this reference, the alloy of Hornung et al. *can only be Austinitic*.

Arguments that the *solid constructive parts* (emphasis as submitted) are “extremely broad” are not found persuasive. It is clear that bipolar plates are clearly envisaged by Hornung et al. as being a member of the solid constructive parts having the inventive alloy, see col. 2 line 57 et seq. as submitted by applicant. As to there being *no specific examples associating compositions with bipolar plates* (emphasis as submitted), the reference in its entirety is considered a complete and specific example, in particular col. 1 lines 1-67 which in the opening paragraph describes a “bipolar plate... characterized by low weight and high corrosion resistance of the material used.”

With respect to the assertion that Hornung et al. teaches away from the claimed range and lacking the sufficient specificity for anticipation, the examiner disagrees and refers back to page 4 of the prior Office action. It is clear from Hornung et al. that Ni is at most 46.5% while Cr is at most 40.5%, equaling at most 87% which is comfortably greater than the claimed combined weight of 50%.

As to the argument regarding a zero amount of nitrogen, the examiner concedes that Hornung et al.’s disclosure of 0.02 wt. %, even when rounded to the nearest whole number, does not teach or suggest a “zero amount of nitrogen.” Though the examiner maintains that the number “zero” has no significant figures, the term “zero amount of nitrogen” has been interpreted as “a composition having no nitrogen.” (remarks on page 10) That is, in numerical terms, the claimed zero amount of nitrogen is equal to 0.00. In view of this distinction, the rejection(s) based on Hornung et al. has been withdrawn.

Double Patenting

Claims 1-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,723,462 B2 (hereinafter the '462 patent), in view of Kanter (U.S. Pat. 3,754,899).

The rejection is maintained for the reasons of record. Applicant's arguments have been fully considered, however they are not found persuasive.

Applicant submits that the differences in temperature operation between PEM fuel cells (such as employed by the '462 Patent) are lower than temperatures in the order of 1000°C disclosed by Kanter, and thus the temperature considerations are not an issue. In reply, the examiner maintains that the latent benefits of having a zero amount of nitrogen in the alloy, such as enhanced boron solubility in the metal alloy, *inter alia*, are considered prevalent even during the lower temperature operation of a PEM fuel cell, absent of evidence to the contrary. Furthermore, the modification would be additionally motivated by a mutual desire of both the '462 patent and Kanter to circumvent corrosion. See the '462 patent in col. 3 line 8 et seq. and Kanter in col. 1 line 10.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER